IN THE CLAIMS:

Please amend the claims as follows:

1-26.   (Canceled)

27.   (Previously Presented)   A computer-implemented method of providing access to data having a particular physical data representation, comprising:

     providing a plurality of logical field definitions, each of the definitions comprising a logical field name, at least one location attribute identifying a location of physical data corresponding to the logical field name, and a reference to an access method selected from at least two different access method types; wherein each of the different access methods types defines a different manner of exposing the physical data corresponding to the logical field name of the respective logical field definition; and

     providing, for a requesting entity, a query specification defining an interface to the plurality of logical field definitions thereby allowing abstract queries to be composed on the basis of the plurality of logical field definitions.

28.   (Previously Presented)   The method of claim 27, wherein a first access method type is a simple access method defining a direct relationship between physical data located at a location identified by a respective location attribute of a respective logical field definition; and wherein a second access method type is a filtered access method defining a filter applied to physical data located at a location identified by a respective location attribute of a respective logical field definition, wherein the filter removes selected data from the physical data so that only a subset of the physical data is exposed by the respective logical field definition referencing the filtered access method.

29.   (Previously Presented)   The method of claim 27, wherein the access methods types comprise a filtered access method defining a filter applied to physical data located at a location identified by a respective location attribute of a respective logical field definition, wherein the filter removes selected data from the physical data so that only a

Page 3

subset of the physical data is exposed by the respective logical field definition referencing the filtered access method.

30.   (Previously Presented)   The method of claim 27, wherein the access methods types comprise a composed access method defining an expression applied to physical data located at a location identified by a respective location attribute of a respective logical field definition, wherein application of the expression produces values different from the physical data to which the expression is applied.

31.   (Previously Presented)   The method of claim 27, wherein the plurality of logical field definitions are defined within a single markup language document.

32.   (Previously Presented)   The method of claim 27, wherein the abstract query comprises:

at least one selection criterion specifying at least one condition defined on the basis of the one or more of the plurality of logical field definitions; and

a result specification specifying one or more of the plurality of logical field definitions to be returned as results for the abstract query.

33.   (Previously Presented)   A computer-implemented method of accessing physical data having a particular physical data representation, comprising:

issuing an abstract query by a requesting entity according to a query specification of the requesting entity; wherein the query specification defines an interface to a data abstraction model defining a plurality of logical field definitions mapping logical fields to the physical data and wherein the abstract query is composed on the basis of the plurality of logical field definitions; and

transforming the abstract query into a query consistent with the particular physical data representation according to the data abstraction model depending on which of the plurality of logical fields definitions are referenced by the abstract query, wherein each of the logical field definitions comprises a logical field name, at least one location attribute identifying a location of physical data corresponding to the logical field

Page 4

name, and a reference to an access method selected from at least two different access method types; wherein each of the different access methods types defines a different manner of exposing the physical data corresponding to the logical field name of the respective logical field definition.

34.   (Previously Presented)   The method of claim 33, wherein a first access method type is a simple access method defining a direct relationship between physical data located at a location identified by a respective location attribute of a respective logical field definition; and wherein a second access method type is a filtered access method defining a filter applied to physical data located at a location identified by a respective location attribute of a respective logical field definition, wherein the filter removes selected data from the physical data so that only a subset of the physical data is exposed by the respective logical field definition referencing the filtered access method.

35.   (Previously Presented)   The method of claim 33, wherein the access methods types comprise a filtered access method defining a filter applied to physical data located at a location identified by a respective location attribute of a respective logical field definition, wherein the filter removes selected data from the physical data so that only a subset of the physical data is exposed by the respective logical field definition referencing the filtered access method.

36.   (Previously Presented)   The method of claim 33, wherein the access methods types comprise a composed access method defining an expression applied to physical data located at a location identified by a respective location attribute of a respective logical field definition, wherein application of the expression produces values different from the physical data to which the expression is applied.

37.   (Previously Presented)   The method of claim 33, wherein the abstract query comprises:

RFOA 050505

at least one selection criterion specifying at least one condition defined on the basis of the one or more of the plurality of logical field definitions; and

a result specification specifying one or more of the plurality of logical field definitions to be returned as results for the abstract query.

38.   (Previously Presented)   A computer-readable medium containing a program which, when executed by a processor, performs an operation of providing access to data having a particular physical data representation, the program comprising:

. a data abstraction model comprising a plurality of logical field definitions each mapping to different elements of the data; wherein each of the logical field definitions comprises a logical field name, at least one location attribute identifying a location of physical data corresponding to the logical field name, and a reference to an access method selected from at least two different access method types; and wherein each of the different access methods types defines a different manner of exposing the physical data corresponding to the logical field name of the respective logical field definition; wherein the data abstraction model is configured to be referenced by a requesting entity to compose abstract queries on the basis of the plurality of logical field definitions.

39.   (Previously Presented)   The computer-readable medium of claim 38, wherein a first access method type is a simple access method defining a direct relationship between physical data located at a location identified by a respective location attribute of a respective logical field definition; and wherein a second access method type is a filtered access method defining a filter applied to physical data located at a location identified by a respective location attribute of a respective logical field definition, wherein the filter removes selected data from the physical data so that only a subset of the physical data is exposed by the respective logical field definition referencing the filtered access method.

40.   (Previously Presented)   The computer-readable medium of claim 38, wherein the access methods types comprise a filtered access method defining a filter applied to physical data located at a location identified by a respective location attribute of a

Page 6

RFOA 050505

respective logical field definition, wherein the filter removes selected data from the physical data so that only a subset of the physical data is exposed by the respective logical field definition referencing the filtered access method.

41.   (Previously Presented)   The computer-readable medium of claim 38, wherein the access methods types comprise a composed access method defining an expression applied to physical data located at a location identified by a respective location attribute of a respective logical field definition, wherein application of the expression produces values different from the physical data to which the expression is applied.

42.   (Previously Presented)   The computer-readable medium of claim 38, wherein the program further comprises a runtime component configured to:

transform an abstract query, received from the requesting entity, into a query consistent with the particular physical data representation and according to the data abstraction model depending on which of the plurality of logical fields definitions are referenced by the abstract query.

43.   (Previously Presented)   The computer-readable medium of claim 42, wherein the plurality of logical field definitions are defined within a single extensible markup language (XML) document.

44.   (Previously Presented)   A computer-readable medium containing a program which, when executed by a processor, performs an operation of accessing data having a particular physical data representation, the operation comprising:

receiving an abstract query by a requesting entity according to a query specification of the requesting entity; wherein the query specification defines an interface to a data abstraction model defining a plurality of logical field definitions mapping logical fields to the physical data and wherein the abstract query is composed on the basis of the plurality of logical field definitions; and

transforming the abstract query into a query consistent with the particular physical data representation according to the data abstraction model depending on

Page 7

which of the plurality of logical fields definitions are referenced by the abstract query,
wherein each of the logical field definitions comprises a logical field name, at least one
location attribute identifying a location of physical data corresponding to the logical field
name, and a reference to an access method selected from at least two different access
method types; wherein each of the different access methods types defines a different
manner of exposing the physical data corresponding to the logical field name of the
respective logical field definition.

45.   (Previously Presented)   The computer-readable medium of claim 44, wherein
a first access method type is a simple access method defining a direct relationship
between physical data located at a location identified by a respective location attribute
of a respective logical field definition; and wherein a second access method type is a
filtered access method defining a filter applied to physical data located at a location
identified by a respective location attribute of a respective logical field definition, wherein
the filter removes selected data from the physical data so that only a subset of the
physical data is exposed by the respective logical field definition referencing the filtered
access method.

46.   (Previously Presented)   The computer-readable medium of claim 44, wherein
the access methods types comprise a filtered access method defining a filter applied to
physical data located at a location identified by a respective location attribute of a
respective logical field definition, wherein the filter removes selected data from the
physical data so that only a subset of the physical data is exposed by the respective
logical field definition referencing the filtered access method.

47.   (Previously Presented)   The computer-readable medium of claim 44, wherein
the access methods types comprise a composed access method defining an expression
applied to physical data located at a location identified by a respective location attribute
of a respective logical field definition, wherein application of the expression produces
values different from the physical data to which the expression is applied.

48.   (Previously Presented)   The computer-readable medium of claim 44, wherein the abstract query comprises:

at least one selection criterion specifying at least one condition defined on the basis of the one or more of the plurality of logical field definitions; and

a result specification specifying one or more of the plurality of logical field definitions to be returned as results for the abstract query.

49.   (Previously Presented)   A computer, comprising:

a memory containing at least:

(i) a data abstraction model which maps logical fields to physical entities of data, the data abstraction model comprising a plurality of logical field definitions each mapping to different elements of the data; wherein each of the logical field definitions comprises a logical field name, at least one location attribute identifying a location of physical data corresponding to the logical field name, and a reference to an access method selected from at least two different access method types; and wherein each of the different access methods types defines a different manner of exposing the physical data corresponding to the logical field name of the respective logical field definition; wherein the data abstraction model is configured to be referenced by a requesting entity to compose abstract queries on the basis of the plurality of logical field definitions; and

(ii) a runtime component configured to transform an abstract query, received from the requesting entity, into a query consistent with the particular physical data representation and according to the data abstraction model depending on which of the plurality of logical fields definitions are referenced by the abstract query; and

a processor adapted to execute contents of the memory.

50. (Previously Presented)   The computer of claim 49, wherein a first access method type is a simple access method defining a direct relationship between physical data located at a location identified by a respective location attribute of a respective logical field definition; and wherein a second access method type is a filtered access method defining a filter applied to physical data located at a location identified by a respective location attribute of a respective logical field definition, wherein the filter

Page 9

RFOA 050505

removes selected data from the physical data so that only a subset of the physical data is exposed by the respective logical field definition referencing the filtered access method.

51.   (Previously Presented)   The computer of claim 49, wherein the access methods types comprise a filtered access method defining a filter applied to physical data located at a location identified by a respective location attribute of a respective logical field definition, wherein the filter removes selected data from the physical data so that only a subset of the physical data is exposed by the respective logical field definition referencing the filtered access method.

52.   (Previously Presented)   The computer of claim 49, wherein the access methods types comprise a composed access method defining an expression applied to physical data located at a location identified by a respective location attribute of a respective logical field definition, wherein application of the expression produces values different from the physical data to which the expression is applied.

RFOA 050505